AN ACCOUNT OF THE REPTILES AND BATRACHIANS COLLECTED BY MR. LEWIS BIRÓ IN NEW GUINEA.*

By prof. L. v. Méhely

(in the National Museum, Budapest.)

(Plate XII.)

A few weeks ago the Hungarian National Museum received an interesting series of Reptiles and Batrachians collected by Mr. LEWIS BIRÓ in German New-Guinea (Kaiser Wilhelmsland). In the following pages I have given a list of all the species represented in this collection which contain many well known forms and also representatives of species new to science or not yet sufficiently known; thus affording a valuable addition to the Herpetology of Papuasia.

REPTILIA.

CHELONIA.

Fam. CHELYDIDAE.

1. Emydura Krefftii GRAY.

Chelymys Krefftii GRAY, «Notes on Australian Freshwater Tortoises» Ann. & Mag. Nat. Hist. London 1871 (4) VIII. p. 366; GRAY «On the Genus Chelymys and its Allies from Australia» Proc. Zool. Soc. of London, 1872, p. 508, tab. XXVIII.

Chelymys victoriae, part. GRAY, Proc. Zool. Soc. 1872, p. 506, fig. 2.

Emydura Krefftii Boulenger, Catal. Chelonians, London 1889, p. 231.

A shell with skull another with complete skeleton, from Erima (Astrolabe Bay).

New to New Guinea.

Carapace a short oval, its width contained about once and one third in its length, feebly expanded posteriorly, slighthly convex, twice and three fourths to nearly three times as long as deep. Nuchal well developed, squarish, twice as long as broad; marginals not serrated; supracaudal

* A M. Tud. Akadémia III.-ik osztályának 1898. évi február 14.-én tartott ülésében előterjesztette Dr. Horvárti Géza r. tag. divided. Vertebrals as long as broad or slightly longer, considerably narrower than the costals (0.75:1); first vertebral broader in front than the following 2—4 in their greatest width; fifth vertebral much broader than the others. All shields more or less irregularly longitudinally sulcated. Plastron moderately large, more than trice as long as the width of the bridge; front and hind lobes perfectly flat; front lobe extending slightly beyond the front margin of the carapace, rounded, about as long as the hind lobe which is angularly notched. Intergular shield not twice as long as broad, considerably longer than the gulars, its posterior angle weged in between the two humerals. Suture between the humerals contained more than three times in the pectoral suture, the last as or nearly as long as the femoral suture and longer than the abdominal suture; suture between the anals shorter than or nearly equal with that between the abdominals. Head large, lower jaw wery strong, its diameter at the symphysis considerably greater than the diameter of the orbit. Shell uniform brown above, yellow inferiorly.

This species appears to have a more extensive geographical distribution than was known. There are several specimens in the British Museum from the Burnett River and Gayndah (Queensland),¹ it was recently brought from the Burnett River by Dr. RICHARD SEMON;² many specimens are in the St.-Pétersbourg Museum from Port Bowen and Gayndah;³ and it is now discowered in New Guinea.

Measurements in mm.	I.	II.
Length of shell	227	217
Width of shell	172	159
Width contained in length	1.32	1.36
Depth of shell	82	73
Depth contained in the length	2.76	2.97
Length of plastron	193	173
Length of font lobe of plastron	63	55
Width of front lobe « «	92	83
Length of hind lobe « «	67	58
Width of hind lobe « «	84	73
Length of bridge	72	65
Width of bridge	50	45
Width of bridge contained in length of plastron	3.86	3.84

¹ G. A. BOULENGER, Catal. Chelon. 1889, p. 231.

² Dr. OUDEMANS in Semon's Zool. Forschungsreisen in Austr. & dem malay. Arch., Jena, 1894. Lief. 1., p. 130.

³ Dr. A. STRAUCH, «Bemerk. über die Schildkr. Samml.», Mém. Acad-St.-Pétersbourg. 1890. (VII) XXXVIII, 2. p. 107.

SQUAMATA.

Lacertilia.

Fam. GECKONIDAE.

2. Gymnodactylus marmoratus KUHL.

G. A. BOULENGER, Cat. Lizards, 1885, I. p. 44.

A single female specimen from Stephansort (Astrolabe Bay). Recorded from Kaiser Wilhelmsland by Dr. BOETTGER.¹

3. Gehyra mutilata WIEGM.

G. A. BOULENGER, Cat. Lizards, 1885, I. p. 148.

Nine specimens from Erima. 4. Lepidodactylus lugubris D. & B. G. A. BOULENGER, Cat. Linzards, 1885, I. p. 165.

Nine specimens from Stephansort.

5. Gecko vittatus Hourr.

G. A. BOULENGER, Cat. Lizards, 1885, I. p. 185.

Five specimens from Erima.

Fam. PYGOPODIDAE.

6. Lialis Burtonii GRAY.

G. A. BOULENGER, Cat. Lizards, 1885, I. p. 247.

Two specimens from Erima.

It must be observed that both specimens have only two nearly equal shields above the eye, which can be regarded as supraoculars. One specimen has six praeanal pores, the other four; both have 22 longitudinal rows of scales round the middle of the body (as in BOETTGER's specimen from Kaiser Wilhelmsland);² the enlarged ventral scales in 93—99 pairs; and the intact tail once and a half as long as head and body together.

Ground-colour light brownish-grey, each scale speckled with darker brown punctulations forming two more or less distinct longitudinal lines along the middle and frequently two dark blotches near the tip of the scale; these longitudinal lines confluent into six more or less distinct longitudinal brown streaks along the back; pearl-white beneath, with three feeblymarked longitudinal streaks, powdered with brown, and a small brown blotch on the tip of each scale.

¹ «Listen von Kriechtieren u. Lurchen aus dem trop. Asien u. aus Papuasien», 29—32 Ber. Offenbach. Ver. f. Naturkunde 1892, p. 147.

² 29-32. Bericht d. Offenbacher Ver. 1892, p. 147.

Head and body 270 mm. Tail 423 mm.

Fam. VARANIDAE.

7. Varanus indicus DAUD.

G. A, BOULENGER, Catal. Lizards, 1885, II. p. 316.

Two specimens from Stephansort.

8. Varanus prasinus Schleg.

G. A. BOULENGER, Catal. Lizards, 1885, II. p. 321.

Two specimen from Stephansort.

Fam. SCINCIDAE.

9. Tiliqua gigas Schneid.

G. A. BOULENGER, Catal. Lizards, 1887, III. p. 144.

Two adult and one young specimen from Erima.

Native name for the adult: «Ujbăgŭrŏdó», for the young: Ujbăgŏrŭdó khedeididi» (khedeididi = small).

10. Lygosoma jobiense MEYER.

G. A. BOULENGER, Catal. Lizards, 1887, III. p. 247.

Four adult and two young specimens from Erima, one from the Oertzen Mountains.

When dry, old specimens with a strong greenish gloss, the young with violet-blue metallic gloss.

The collector also sent two eggs of this species; they are cylindrical, broadly rounded at each end, 19-20 mm. long and 9.5-10 mm. width, membranaceous, soft, dirty white.

11. Lygosoma smaragdinum Less.

G. A. BOULENGER, Catal. Lizards, 1887, III. p. 250.

A single specimen from Friedrich-Wilhelmshafen.

12. Lygosoma noctua Less.

G. A. BOULENGER, Catal. Lizards, 1887, III. p. 256.

Six adult and a young specimen from Erima.

It must be observed, that the frontal shield is frequently a little shorter than, though often as long as frontoparietals and interparietal together. Of the 7 specimens, 4 have 24 scales round the middle of the body, two have 26 (in the seventh the number cannot be ascertained); generally 19—21 smooth subdigital lamellae under the fourth toe. This statement shows that the new species L. *miotis* described a few months ago by G. A. BOULENGER¹ on a single specimen from Ferguson Island (D'Entrecasteaux Group) strikingly resembles L. *noctua*, from which it differs in the fused frontoparietals, a character which may perhaps be only an individually peculiarity.

13. Lygosoma cyanurum Less.

G. A. BOULENGER, Catal. Lizards, 1887, III. p. 290.

Two adult specimens from Friedrich-Wilhelmshafen.

33 and 36 scales round the middle of the body; 40 and 42 subdigital lamellae under the fourth toe. Black above, whith five longitudinal golden streaks and violet-blue strong metallic gloss.

Our specimens from New Guinea possess generally 27—36 scales round the middle of the body and 37—44 subdigital lamellae under the fourth toe.

14. Lygosoma Mivarti BLGR.

G. A. BOULENGER, Catal. Lizards, 1887, III. p. 292. tab. XXIII. fig. 1. & 1. a.

Three females and twenty males from Stephansort; one male from the Oertzen Mountains.

Morphologically not very different from L. *cyanurum* Less. from New Guinea.

32—37 scales round the middle of the body, 33—40 subdigital lamellae under the fourth toe (in one case 44). Body of males shorter than that of females; the distance between the end of the snout and the fore limb is contained $1^{1/4}$ — $1^{1/3}$ in females, 1— $1^{1/5}$ in males, in the distance between axilla and groin. Supralabialia varying much in number,

in	14	specimens	are	4 - 4
"	5	(("	4-5
"	5	"	"	5 - 5.

In the *coloration* of males and females show a constant and very distinct dimorphism.

Male. Brown above, frequently with small black spots on a more or less distinct darker brown band longitudinally arranged on each side of the lighter vertebral zone. Sides with a deep blackish-brown band, confluent in front with the dark brown lateral colour of the head, extending posteriorly on the side of the tail; this dark lateral band edged above with a more or less distinct white line or confluent white spots, below with a strong white streak commencing from the lower edge of the ear, sometimes indistinctly prolonged to the angle of the mouth, extending posteriorly on

¹ Ann. & Magaz. of Nat. Hist. (6) XVI. 1895. p. 29.

the side of the tail and extending to the arm and often also to the leg. Tips of fingers and claws frequently white. The specimens when dry with a very strong violet-blue metallic gloss, especially on the dark lateral band. Lower parts greenish pearl-white.

Female. Brown above with a lighter median zone on the back, on each side of which is a darker band edged with a more or less strong blackish streak or confluent spots. Sides of head and body with a dark brown band edged above and below with a very sharp while streak, the upper of which extends from the supraciliary scales to the fore part of the tail, the lower commencing from the fore angle of the mouth and running along the upper labials and across the ear to the groin and over the arm. Lower parts yellowish-white. The metallic gloss feebly marked. The female is represented in BOULENGER's fig. 1. & 1. a. (tab. XXIII.)

15. Lygosoma callistictum PTRS & DOR.

G. A. BOULENGER, Catal. Lizards, 1887, III. p. 295.

A single specimen from Erima.

The distance between the end of the snout and the for limb is contained once and one eighth in the distance between axilla and groin. The hind limb reaches the elbow. Tail twice as long as head and body. Only four labials anterior to the large subocular. Frontal in contact with the first, second, and third supraoculars; 2—8 scales round the body; dorsal scales very feebly bi-or tricarinate; 39 lamellae under the fourth toe.

Brown above; a fulvous streak along the middle of the head and nape, indistinctly prolonged on the back to the thail; a similar but indistinct streak on each side of the back. Lower surface pearl-white, on the hinder part of the tail grey.

I refer this specimen with some doubt to L. callistictum PTRS as it differs in many points from PETERS & DORIA'S and BOULENGER'S descriptions and very strikingly resembles the specimens which have been described and figured by Dr. v. LIDTH DE JEUDE as a variety of L. callistictum, from the same locality.¹

16. Lygosoma Muelleri Schleg. var. latifasciatum Meyer.

G. A. BOULENGER, Catal. Lizards, 1887, III. p. 339.

A single specimen from Erima.

No suture between frontonasal and frontal shields, but the praefrontals as well as frontal and frontonasal meet in one point (!) as in Dr. VAN LIDTH'S specimen from the same locality.² 32 (!) smooth scales round the middle

² L. c. p. 253.

¹ Notes from Leyden Museum XVIII. 1896/7, p. 252.

of the body. A pair of strongly enlarged praeanals; 17 smooth subdigital lamellae under the fourth toe, divided along the middle.

Chocolate-brown above with indications of several lighter longitudinal streaks along the corresponding parts of the longitudinal rows of dorsal scales, and several slightly distinct transverse brownish bands on the lighter flanks and on the sides of the tail. Lower surface pearl-white, throat and hinder part of tail darker.

Head and body 180 mm. The reproduced tail 135 «

Ophidia.

Fam. BOIDAE.

17. Python amethystinus SCHN.G. A. BOULENGER, Catal. of the Snakes, 1893, I. p. 83.

Three specimens from Erima.

18. Enygrus carinatus SCHN.

G. A. BOULENGER, Catal. Snakes, 1893, I. p. 107.

Two specimens from Friedrich Wilhelmshafen, three from Erima. Native name in Erima: «Gyuli» or «Mányi»,

19. Enygrus asper GTHR.

G. A. BOULENGER, Catal. Snakes, 1893, I. p. 109.

Two specimen from Friedrich Wilhelmshafen, nine from Erima. Native name in Erima : «Száŏá».

Fam. COLUBRIDAE.

Series A. Aglypha.

20. Tropidonotus picturatus Schleg.G. A. BOULENGER, Catal. Snakes, 1893, I. p. 215.

A single young specimen from Erima.
Native name in Erima : «Gyimŏró».
21. Stegonotus modestus Šchleg.
G. A. BOULENGER, Catal. Snakes, 1893, I. p. 366.

Three males and a female from Stephansort.

The morphological caracters between the sexes are so different that I find it advisable to deal with them separately.

Male. Rostral much broader than deep, the portion visible from above measuring about one fifth its distance from the frontal; frontal as long as broad, nearly as long as its distant from the end of the snout (as in *St. cucullatus* D. & B.); two praeoculars (in one specimen only one), two postoculars; temporals 2+2 (in a specimen on one side 2+3); eight upper labials once on one side only 7), 4+5 entering the eye (once on one side 3+4) as in *St. cucullatus*; five lower labials in contact with the anterior chin-shields.

Female. Rostral a little broader than deep, the portion visible from above measuring nearly one half its distant from the frontal as in *St. cucullatus*; frontal as long as broad, distinctly shorter than its distance from the end of the snout; two praeoculars, two postoculars; temporals 2 + 3; 7 upper labials, 3 + 4 entering the eye; four lower labials in contact with the anterior chin-shields.

Formula of scaling:

Male.	Squ.	17;	G. $^{2}/_{2} + 2$; V.	. 181;	A. 1;	Sc.	$\frac{2}{2} + 3 + \frac{81}{81} + 1$.
((«	17;	(2/2 + 1)	; «	179;	«1;	«	$\frac{83}{83} + 1$.
(("	17;	« ² / ₂ + 1	; «	176;	«1;	«	$\frac{88}{88} + 1.$
Female.	((17;	(2/2+2)	; «	212;	«1;	"	$\frac{86}{86} + 1.$

Coloration. Upper parts uniform slate-grey (perhaps only through the action of formalin) with bluish metallic gloss; upper lip and lower parts yellowish.

This observations confirm Dr. v. LIDTH DE JEUDE's opinion,¹ that St. modestus and cucultatus must be united in the same species, as there no are enough constant differences between them.

22. Dendrophis calligaster GTHR.

G. A. BOULENGER, Catal. Snakes, 1894, II. p. 80.

A single specimen from Erima. Native name in Erima: «Ogádáŭ».

Series B. Opistoglypha.

23. Dipsadomorphus irregularis MERR., var. papuanus.
G. A. BOULENGER, (forma B.) Catal. Snakes, 1896, III. p. 75, 76.

Two specimens from Stephansort and two from Seleo Island near Berlinhafen.

Rostral a little broader than deep, the portion visible from above measuring about 1/5—1/3 its distance from the frontal; frontal as long as broad, or a little longer, frequently a little longer than its distance from

¹ Notes from Leyden Museum 1896/7, XVIII. p. 255.

the rostral; one prae- and two or three postoculars; temporals 3+3 or 3+2; nine (sometimes eight) upper labials, 4+5+6 (rarely 3+4+5) entering the eye; frequently five lower labials in contact with the anterior chin-shields. Scales constantly in 21 rows, vertebral row strongly enlarged. Formula of scaling :

Stephansort.	Squ.	21;	G. ²	/2;	V.	251;	А.	1;	Sc.	$\frac{116}{116} + 1.$
"	"	21;	" 2	/2;	"	248;	«	1;	"	$\frac{119}{119} + 1$.
Seleo Island.	"	21;	« ³	/s + 1;	"	246;	"	1;	«	$\frac{103}{103} + 1$.
"	«	21;	« ²	$/_{2} + 3;$	"	245;	"	1;	(($\frac{105}{105} + 1.$

Coloration. The specimens from the coast of German New Guinea are very constant in their coloration. Pinkish-grey above, each scale spekled with very fine brown dots, blackish-brown spots across the body, transversely arranged and sometimes confluent into indistinct cross bars; from the hinder edge of the eye, behind the angle of the mouth a more or less distinct darker streak; yellowish below, with darker punctulation on the ventrals; subcaudals speckled with brown.

Biological note. In the stomach of one specimen were 7 shells of fowls'eggs.

Series C. Proteroglypha.

24. Pseudelaps Muelleri Schleg. G. A. BOULENGER, Catal. Snakes, 1896, III. p. 316.

Two quite typical specimens from Stephansort. Formula of scaling :

Squ. 15; G. 3; V. 163; A. 1/1; Sc. 34/34 + 1. « 15; « 3; « 167; « $\frac{1}{1}$; « $\frac{32}{32} + 1$.

In *coloration* strikingly resembles another specimen collected by the late SAMUEL FENICHEL in the neighbourhood of Astrolabe Bay, which I have described two years ago;¹ differs however in the absence of the median dorsal stripe and the speckled belly.

25. Micropechis ikaheka Less. G. A. BOULENGER, Catal. Snakes, 1896, III. p. 347. Two specimens from Stephansort. Agreeing strictly with Boulenger's latest description. Formula of scaling:

¹ Természetrajzi Füzetek. Budapest, 1895, XVIII. p. 79 & 135.

L. v. MÉHELŸ

Squ. 15; G. 3; V. 178; A. $\frac{1}{1}$; Sc. $\frac{37}{37} + 1$. (15; 3; 183; 183; 171; 41/41 + 1.

Reddish-yellov above, head blackish, blackish spots on the fore part of the body, arranged in four longitudinal rows; irregular dark cross bars on the hinder part of the body and tail. Lower surface yellow, the ventral shields brownish edged in front.

26. Acanthophis antarcticus Shaw.

G. A. BOULENGER, Catal. Snakes, 1896, III. p. 355.

Two specimens from Stephansort.

Supraocular raised; upper head-shields smooth; the large praeocular broken up into three shields on one side of the head; 1—3 post- and 3 suboculars; temporals 2 + 3 (one times 4); six upper labials; the posterior chin-shields separated by three small scales.

Formula of scaling:

Squ. 21; G. $3 + \frac{2}{2} + 2 + \frac{2}{2}$; V. 122; A. 1; Sc. $46 + 1.^{1}$ (21; 7; (121; 121; 27)) (121; 27) + $\frac{18}{18} + 1$.

Coloration. Ash-grey above with darker cross bands ond their fore and hinder edges spoted with black, the interspace between this darker bands dirty white. Lower parts white; a black blotch on each upper and lower labial, chin-shield and throat-scale; ventrals with black patches which are in four rows on the hinder part of the belly, the two outer stronger; subcaudals each with a black blotch.

BATRACHIA.

Fam. RANIDAE.

27. Cornufer corrugatus A. DUM.

G. A. BOULENGER, Catal. of the Batrachia Salientia, 1882, p. 110.

A single specimen from Erima.

The style of the omosternum is in this specimen also forked before the procoracoideum as I already stated in another specimen from Bertrand Island.² It may be remarked that a feeble but distinct median keel runs from the point of the snout towards the vent; the width of the interorbital space equals about three fifths that of the upper eyelid; the diameter of the

¹ The 30-32, 34, 39-40 and 40-46 divided.

² Természetrajzi Füzetek. XX (3) Budapest, 1897, p. 400 & 411, tab. X, fig. 1.

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tympanum equals half that of the orbit, statements which shows a very great ressemblance to C. solomonis BLGR.¹ from Shortland, Treasury and Faro Islands.

Fam. ENGYSTOMATIDAE.

Choanacantha gen. nov.

Pupil horizontal. Tongue large, circular, slightly nicked behind, perfectly adherent in front an behind, free only at the sides, with two linear furrows along the middle and two semicircular ones before the preceeding. Palate toothless, palatine bones each with one large straight toothlike bony prominence. One dermal transverse denticulated ridge in front of the oesophagus. Tympanum by no means observable. Fingers and toes perfectly free, the tips blunt, feebly dilated. Outer metatarsals separated. Terminal phalanges T — shaped. No praecoracoids, no omosternum, sternum a large cartilaginous plate. Diapophyses of sacral vertebrae dilated.

This new genus is very closely allied to PETERS and DORIA'S *Xeno-batrachus*,² but differs in the tongue, which is perfectly adherent behind; in the single toothlike bony prominence on each palatine bone; in the perfectly hidden tympanum; and in the separated outer metatarsals.

28. Choanacantha rostrata n. sp. (tab. XII., fig. 1-11.)

A single female specimen from Erima.

Habit stout. Head subtriangular, broader than long, contained about twice in the length of the body; snout short, rostrum-like, prolonged, obtusely pointed, nearly twice as long as the cleft of the orbit; canthus rostralis indistinct; loreal region nearly vertical; a distinct furrow from the eye to the nostril; nostril a little nearer the tip of the snout than the eye; eyes small, nearly half the length of the snout; interorbital space three times as broad as the upper eyelid. Fingers and toes short, cylindrical, feebly dilated and blunt at the tips; subarticular tubercles very indistinct; inner metatarsal tubercle hardly distinguishable, small, roundish; no outer metatarsal tubercle; first finger a little shorter than second. Hind limbs short; the tibio-tarsal articulation does not reach the axilla. Skin smooth, with a few scattered slight tubercles on the upper surface.

Coloration. Head, body and limbs slate-coloured above, lighter down the sides. A dark blackish band along the hinder side of the thighs and a triangular dark patch on the sole. Along the middle of the body runs a

¹ «On the Reptiles and Batrachians of the Solomon Islands», Transact. Zool. Soc. of London, XII. 1890, p. 54.

² Catalogo dei Rettili e dei Batraci... Austro-Malese. Annali Mus. Genova, XIII, 1878, p. 432, tab. VII, fig. 5.

white stripe from the tip of the snout to the anus, which is split into two branches above the anus and extends along the upper side of the leg and the outer side of the tibia to the dark plantar blotch. Yellowish-white beneath, dotted with slate-grey, the dots closer on the throat, the chest and the palmar and plantar surface of the limbs, very scattered on the belly and under the legs.

Length 39 mm. from snout to vent.

Fam. HYLIDAE.

29. Hyla dolichopsis Cope.

G. A. BOULENGER, Catal. Batr. Salient., 1882, p. 384.

A single specimen from Erima.

Diameter of disks of fingers 7.25 mm., diameter of the tympanum 7 mm. Length from snout to vent 108 mm.

Native name in Erima : «Feligó».

30. Hyla infrafrenata Gтнв.

G. A. BOULENGER, Catal. Batr. Salient., 1882, p. 385.

Two specimens from Seleo Island near Berlinhafen and two from Erima. The proportion between the size of the disks of fingers and the tympanum undergoes many variations, as the following observations show; however the diameter of the disks is always a little smaller than that of the tympanum.

Measurements in mm.	Seleo	Seleo	Erima	Erima
Diameter of disks	5.75	5.5	$5 \cdot 2$	3
Diameter of tympanum	6	6.3	5.75	3.75
From snout to vent	91	83	86	57

This species perhaps can be united with the preceding.

31. Hyla impura Pts. & Dor.

G. A. BOULENGER, Catal. Batr. Salient., 1882, p. 409.

Twelve males and twelve females from Erima (Astrolabe Bay), collected at 21. November 1896.

The descriptions by PETERS & DORIA 1; and Dr. v. LIDTH DE JEUDE²

¹ Ann. Mus. Genova. XIII. 1878, p. 426, tab. VII, fig. 2.

² Reptiles and Batrachians from New Guinea. Notes from the Leyden Museum. XVIII. 1896/7. p. 257. are not quite correct, in all probability because their account was drawn up from specimens out of the breeding season. I will give a new description.

Head as long as broad. Tongue cordiform, more or less nicked behind. Vomerine teeth in two slighthly oblique patches between the choanæ, but their hinder edges never extending beyond the hinder edges of the choanae, as errenously figured by PETERS & DORIA (fig. 2., 6.). Snout high, rounded at the tip, longer than the diameter of the eye (7:5) with a median concavity above; canthus rostralis distinct, nostril projected, immediately below the canthus rostralis, twice nearer the tip of the snout than the eye; loreal region concave. Tympanum three fifth the diameter of the eve in the females, a half in the males. Fingers with a very distinct web at the base, namely between the third and fourth finger; no distinct rudiment of pollex. The breeding male with a longish patch of small black tubercles on the inner side of the first finger. Disks of fingers nearly as large as the tympanum in the males, half as large as the tympanum in the females. Toes nearly entirely webbed. Tibio-tarsal articulation reaching the tip of the snout in the females, extending to between the eye and the nostril in the males. Subarticular tubercles of fingers and toes moderate; inner metatarsal tubercle oval, weak, longer than the distance between them and the subarticular tuberele of the first toe; no outer metatarsal tubercle, but a small one between the third and fourth toes. Skin smooth above; granulated beneath, densely on belly and on the lower side of the thighs, sparingly on the throat and chest; a row of granules on the outer edge of the forearm; a very distinct fold across the chest.

Coloration.

Female. Reddish-brown above irregularly marbled with darker; hinder side of thigs often blackish-brown and always white-punctate; all round the anus a blackish-brown triangular blotch edged with a white line above. This dark patch has already been represented by PETERS & DORIA but in his figure is the white edge of the patch to highly posited. Dirty yellowishwhite beneath, powdered with brown on the throat and limbs.

Male. Lighter brown, greyish or ash-coloured, more indistinctly marbled with darker; hinder side of thigs never blackish but frequently whitepunctate; the white edged dark anal blotch always present. Below as in the female, often uniform dirty white.

Size. From snout to vent 40 mm. (\checkmark) or 46 mm. (\updownarrow).

Biological note. The collector of this species writes: At the end of the dry season they comme out for after the first rains and begin to lay their eggs. These are dark brown on one side white on the other side. Their voice is a low creak, so feeble that it is only heared as far as ten stride.

Természetrajzi Füzetek. XXI. köt.

32. Hula thesaurensis PTRS.

G. A. BOULENGER, Catal. Batrachia Salientia, 1882, p. 409.

Two young specimens from Stephansort.

EXPLANATION OF THE XII. PLATE.

1. Choanacantha rostrata nov. gen. et spec. Fig.

Natural size.

- 2. Tongue. ĸ
- 3. Palate. Behind the choanae both bony prominences covered with the u mucosa. In front of the oesophagus the denticulated dermal ridge. Eustachian tubes not visible.
- 4. Choana and the bony prominence in half-profil view; the mucosa removed " from the bony prominence.
- 5. Palate. Palatine bones with the two toothlike bony prominences behind the choanae.
- 6. The perfectly free fingers.
- 7. The perfectly free toes. (
- 8. The tarsal and metatarsal sceleton of the hind foot.
 - ft = fibulo-tarsale
 - tt = tibio-tarsale

dgt 1-6 = digito-tarsalia 1-6

mt. I—V. = metatarsalia I—VI.

- mt. VI.
- ph. VI. = phalanges digiti VI.
- ! dgt. 6 + mt. VI + ph VI = forms the sixth toe according Brühl's opinion (Zootomie aller Thierklassen, Wien, 1877, Lief. 8., tab. XXX and Text).
- 9. Phalanx terminalis of the third finger.
- 10. Apparatus sternalis.
 - est = episternum
 - st = sternum
 - co = coracoideum
 - sc = scapula
 - ssc = suprascapulare.
- 11. Columna vertebralis. 46

1-10 = the 10 vertebrae

- $vs = vertebra \ sacralis$
- pa = parapophyses
- co = costal rudiments
- $oc = os \ coccygis.$